IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

SOVERAIN SOFTWARE LLC,	§	
	§	Hon. Leonard E. Davis
Plaintiff,	§	
	§	
v.	§	Civil Action No. 6:04-CV-14
	§	
(1) AMAZON.COM, INC., and	§	
(2) THE GAP, INC.,	§	JURY TRIAL DEMANDED
	§	
Defendants.	§	

AMAZON.COM'S SURREPLY TO PLAINTIFF'S REPLY ON PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT OF LITERAL INFRINGEMENT

I. INTRODUCTION

Summary judgment of literal infringement must be denied because there are many factual disputes between the parties regarding whether Amazon.com's systems meet each and every element of the claims. For example, Soverain contends that over a thousand separate computers at Amazon.com that are functionally independent and perform vastly different operations can all be lumped together and classified as a single "shopping cart computer." This strains the bounds of reality, and Amazon.com expects a reasonable jury will agree that Soverain's proposition is ludicrous. However, for infringement purposes, the sole question is whether those thousand-plus computers constitute a single "functional unit." Soverain says they are, while Amazon.com has presented facts and expert opinion to the contrary. While Soverain complains that Amazon.com is rearguing claim construction, Amazon.com's opposition does no such thing. As it must, Amazon.com has applied the Court's construction and has shown with specific factual evidence and expert opinion how claim elements are simply missing from the Amazon.com system. Because of this and other similar factual disputes as to whether the claim construction reads on Amazon.com's system, summary judgment of literal infringement must be denied.

II. AMAZON.COM DOES NOT INFRINGE CLAIMS 15-16 OF THE '492 PATENT

A. Both Claims 15 *And* 16 Require A Server Computer To Perform The Two Functions Of Recording And Transmitting

Soverain does not dispute that apparatus claim 15 requires a server computer to be programmed to both record purchase transactions in a database and transmit a statement document to a client computer. Soverain contends, however, that this requirement does not exist for method claim 16. Soverain is wrong and contradicts the express language of the claim.

In claim 16, the two functions of recording and transmitting are recited as the sole two steps in the claimed method. Soverain's argument that the two steps need not be performed by

the same server computer ignores that the preamble of the claim expressly recites that these two steps are "a method of operating ***a server computer***. . . the method comprising the steps of:" "recording …" and "transmitting . . ."[1] Accordingly, Soverain's argument that claim 16 is broader than claim 15 and allows the method steps to be performed by "two different server computers" instead of "a server computer" is contrary to the express terms of the claim.[2]

B. No Such Server Computers Exists At Amazon.com

Amazon.com has thousands of server computers, each performing its own functions. Amazon.com's opposition set forth facts showing how the transmitting and recording functions are performed by different computers. Specifically, Amazon.com presented fact testimony explaining that the transmitting of statement documents to customers is performed by the webserver computers (called "onlines"), while the recording of purchase transaction records is performed by software running on two types of database computers. (Ravindran Dec. at ¶¶ 24, 32, 35-38).

Soverain now contends that the "online" computers also perform the recording step because "instructions" from the onlines "cause the recording to occur." However, Soverain's "causation" argument cannot support summary judgment for two reasons. First, Soverain provides no evidence to support its "instruction" and "causation" argument. Neither Soverain nor its expert witness Dr. Grimes have pointed to any such "instruction" sent from the onlines to the databases instructing them to record the information into the database. Second, there is a

[1] Although the claim allows there to be "one or more server computers," the method steps are expressly described as being for operating "a server computer" and as being performed "at one of the server computers." After reciting these two steps for a server computer, the claim adds a ***separate*** limitation for "at least one of the server computers."

[2] Soverain's opposition was the first time Soverain ever contended that claim 16 did not require a server computer to perform both tasks. If Soverain were correct, then there still would be no infringement because the computers inside Amazon.com's private network that record transaction records in the database are not connected to the public Internet (and thus are not connected to customer computers over the Internet). (Cohen Dec. at ¶¶ 23-33; Ravindran Dec. at ¶ 37); *see also* infra Section III(C).

good reason why they can point to no instruction: there is none. Mr. Ravindran, Amazon.com's engineer explained how the software on the database computers that performs the recording "does not have any interaction with" the onlines, is "not invoked or controlled by" the onlines, and "function[s] independently" from the onlines. (Ravindran Dec. at ¶¶ 37-38). Instead, the onlines "do not record, and do not cause the recording of" the purchase transaction records. (Ravindran Dec. at ¶¶ 37).

Thus, Soverain's theory (which is unsupported by any evidence) is flatly contradicted by specific evidence in Amazon.com's opposition materials. This evidence shows that no server computer at Amazon.com performs both functions (even under Soverain's "causation" theory).[3] The Court should therefore deny summary judgment of literal infringement on claims 15 and 16.

C. Soverain's Multi-Computer Argument Must Fail

Since it cannot force-fit all of the required functions onto the "online" computers (which do not record or cause the recording), Soverain takes a separate tack and tries to lump all of the Amazon.com computers together as the same "server computer." To try to get some traction with this argument, Soverain actually accuses Amazon.com of rearguing claim construction on the term "computer." Although the computer rejected Amazon.com's proposal that a "computer" must be a "single device," it did not construe the term to allow any number of machines to be lumped together willy-nilly as Soverain does. The Court instead held that a "computer" is a single "functional unit." Soverain apparently views thousands of different computers spread all over Amazon.com's data centers to be one "functional unit," but, curiously,

[3] Soverain's contention that summary judgment is required by the Court's rejection of Amazon.com's "direct-action" construction for "record" is a red herring. Amazon.com's evidence shows that the "online" computers that transmit statement documents neither directly record nor even "cause" the recording. Far from rearguing construction, Amazon.com set forth ***facts*** showing non-infringement under the Court's construction. Notably, it is Soverain that sets forth no facts whatsoever showing how the onlines can be considered to "cause" the recording.

provides no evidence to explain which computers are in the "functional unit" much less why these are all the same "functional unit" rather than different "functional units."

In contrast, Amazon.com's opposition materials set forth specific factual evidence showing why the computers that perform the recording function are ***different functional units*** than the computers that perform the transmitting function. For example, they function independently from each other, they perform a different set of functions, they run separate software, etc. (Ravindran Dec., ¶ 35, 38; 6/23/05 Cohen Dec., ¶ 34). Furthermore, Amazon.com's expert Dr. Taylor also views them as being different "functional units." (6/23/05 Taylor Dec., Ex. 2 at 27-29). Thus, far from fighting the Court's construction, Amazon.com has embraced it (as it must) and shown, with evidence, why there is no infringement when it is applied to Amazon.com's system. At the very least, there is a genuine issue of fact whether these computers are or are not different "functional units."

III. AMAZON.COM DOES NOT INFRINGE CLAIMS 35-36 OF THE '492 PATENT

A. Both Claims 35 *And* 36 Require A Shopping Cart Computer To Perform The Two Functions Of Receiving And Modifying

Soverain does not dispute that apparatus claim 35 requires that a "shopping cart computer" be programmed to both (a) receive a plurality of shopping cart messages sent over the network to the shopping cart computer by the buyer; and (b) modify the shopping cart in the shopping cart database to reflect the plurality of requests. Soverain contends, however, that this dual function requirement does not exist for method claim 36. As with claim 16 discussed in Section IIA above, Soverain is wrong for claim 36 as well.

In claim 36, the two functions of receiving and modifying are recited as the sole two steps in the claimed method. Soverain's argument that the two steps need not be performed by the same shopping cart computer ignores that the preamble of the claim expressly recites that

these two steps are "a method of operating ***a shopping cart computer*** . . . the method comprising the steps of:" "receiving, at ***the*** shopping cart computer, . . ." and "modifying the shopping cart . . ."[4] Accordingly, Soverain's argument that claim 36 is broader than claim 35 and allows the method steps to be performed by "two different shopping cart computers" instead of "***a*** shopping cart computer" contradicts the express terms of the claim.

B. No Such Shopping Cart Computer Exists At Amazon.com

Amazon.com's opposition materials set forth specific facts showing how the computers that perform the receiving and modifying steps at Amazon.com are not the same computer. Soverain's reply contends that Amazon.com "admits" that the "online" computers both receive the shopping cart messages and also modify the alleged "shopping cart" in the database. (Reply at 4). Amazon.com has admitted no such thing. Amazon.com's opposition materials were quite clear that this is not the case by explaining, using specific facts and testimony, how the onlines do ***not*** modify or even case modification of the shopping cart. (Ravindran Dec., ¶¶ 10-12, 17-21). Instead, the process of modifying the alleged "shopping cart" in the database is initiated and performed entirely by other computers inside Amazon.com's private network. (*Id*. ¶¶ 10-12, 17-21). Because no Amazon.com computer performs both the receiving and the modifying (or even causing the modification) steps, there can be no infringement.

Finally, Soverain cannot support its literal infringement argument by lumping together at its whim all of these different computers and calling them a single "shopping cart computer" so as to shun its burden of showing each and every element of the claims. *See* Section II(C) above. Amazon.com has set forth specific facts showing how these computers that perform the different

[4] Although the claim states that there is "at least one shopping cart computer," implying that additional shopping cart computers may be present, the method steps are expressly described as being for "operating ***a*** shopping cart computer" and are performed by "***the*** shopping cart computer."

functions of receiving and modifying are different "functional units." Because of this genuine dispute of fact, summary judgment is not available.

C. The Only Computer That Modifies The Accused "Shopping Cart" (Or Even Causes The Modification) Is Not Connected To A Public Network.

The computers that modify (or even arguably cause modification of) the alleged "shopping cart" are all on a private internal network such that they have no links to send data to the outside world (e.g., to buyer computers). (Cohen Dec. at 22-33; Ravindran Dec. at 19). Thus, under the Court's construction ("having a link to . . . to send or receive data"), the buyer computers and alleged "shopping cart computer" that modifies the database are not interconnected (i.e., connected) over a public network.

Soverain's response is to ignore the Court's claim construction entirely, and to once again, attempt to lump together as a single "computer" the thousands of "online" computers (which are connected to the public network) with the hundreds of back-end computers involved in modification (which are ***not*** connected to the public network). As discussed above, the evidence Amazon.com has presented shows that these computers are separate "functional units." Soverain cannot lump together to avoid the effect of Amazon.com's private, internal network.

D. Under Dr. Shamos's Testimony, Amazon.com's Alleged "Shopping Cart" Does Not Meet The Claim Language

As explained in detail in Amazon.com's opposition brief, Soverain presents two different experts applying the court's construction in two vastly different ways, one way (by Dr. Grimes) to Amazon.com's product and another way (by Dr. Shamos) to the prior art. Soverain argues that Amazon.com is trying to reargue claim construction (but fails to explain how), when it is Soverain that is trying to have two different constructions, one way for Amazon.com and another for the prior art. Such a two-faced approach is precluded by law. (Opp. at 16-17).

Dr. Shamos said that (for the prior art) the "shopping cart" cannot merely be an identification of the product in a database but must include an icon, picture, or other "representation" of that product. As explained in the opposition, the information included in the accused "shopping cart database" is an ASIN (identification number) for a product, which under Dr. Shamos's testimony, does not meet the requirement of a "stored representation" of the product. Soverain's new argument that this identification number includes a link to further product information in ***another*** database (which is on a different machine!) cannot help its infringement argument. The Court rejected Soverain's proposal that a "database" could include data spread all over and instead construed "database" (which applies to "shopping cart database") to require the data be "stored together." (Claim Contr'n Order at 18). Because Soverain has presented no evidence that the missing product information is "stored together" with the alleged "shopping cart," Soverain cannot prove infringement with its new theory.

IV. AMAZON.COM DOES NOT INFRINGE THE '780 PATENT CLAIMS

A. The Accused 3-7-7 Number Does Not Have The Capability Of Identifying A "Session" Involving *A Client*

As briefed in great detail in Amazon.com's own Motion for Partial Summary Judgment of Non-infringement, Amazon.com does not infringe claims 1, 4-5, 8-10, and 22-24 of the '780 patent because Amazon.com's 3-7-7 code (the accused "session identifier") does not meet the Court's construction of a "session identifier" that identifies a "session" because the 3-7-7 code can be used by many clients (not one client) all interacting with the server system at the same time. Amazon.com's evidence of non-infringement on this point includes factual testimony of the operation of the system, the opinion testimony of Dr. Taylor, and, most damaging to Soverain, the testimony of its own prior art experts Dr. Shamos and Mr. Martin, who testified

that prior art identifiers did not meet the claim limitations because (like Amazon.com) multiple clients could use the same number to interact with the server. (*See* evidence cited at Opp. at 3).

Soverain's contention that Amazon.com is rearguing claim construction is again unfounded. Amazon.com is not rearguing (as it proposed at *Markman*) that a session be uninterrupted and identify a client with its IP address and user name. Instead, now there is factual dispute regarding whether the 3-7-7 code identifies a set of tasks between a server system and "a client," as the Court construed the claims to require. Amazon.com's expert Dr. Taylor has explained how the 3-7-7 number permits interactions involving multiple clients using the same number, not limited to "a client." This is consistent with Soverain's own experts Dr. Shamos and Dr. Martin, who explained how prior art that operated the same way could not meet the claims. It is not Amazon.com that is trying to reargue claim construction; instead it is Soverain trying to argue different applications of the same construction for infringement and validity questions, which is contrary to the law. (*See* law at Opp. at 16-17).

B. Amazon.com Does Not Append The Accused 3-7-7 Number "To The Request" But Instead Appends The Number To A Response

All of the claims of the '780 patent expressly require appending of a "session identifier" or "authorization identifier" "to the request." Soverain's infringement argument is that Amazon.com's servers append the 3-7-7 number to URLs in web pages that the servers send to customers. However, as Dr. Taylor explains, web pages are not "requests," but instead are responses. (Opp. at 21). Thus, Amazon.com does not append the 3-7-7 number "to the request."

Caught with a serious flaw in the claim language, Soverain has a brand new theory: that the responses sent by Amazon.com's servers are actually "requests." Soverain's efforts to twist words to mean whatever Soverain says they mean must fail for a number of reasons.

First, Soverain's equating of requests and responses contradicts the Court's construction of "service request," as "a solicitation of services ***from a client to a server***." It is undisputed that Amazon.com's web pages (containing the 3-7-7 number) are sent from a server to a client, the opposite of what the Court's construction requires.

Second, Soverain's new contention that a server "response" is the same as a "request" contradicts the testimony of its expert witness Mr. Grimes both in his deposition and in the tutorial he submitted on Soverain's behalf to the Court. In his deposition, Dr. Grimes was clear that service "requests" are generated and sent by clients, while "responses" are generated and sent by servers.

> Q. How does a server respond to service requests, in general?
>
> A. In general, the -- it generates a response which is sent back to the client, and so clients obtain service by making a request and getting a response from the server and that basically ends the one unit of the interaction. (Grimes Deposition (6/3/05) at 79:5-11).

Likewise, in the technology tutorial, Dr. Grimes explained that a client-server is a "series of client requests and corresponding server responses." (Soverain 12/24/04 Tutorial, at slide 46).

Third, even without Soverain's own flip-flopping, there is at least an issue of fact for trial because Amazon.com's expert Dr. Taylor's declaration explains how under the Court's claim construction, Amazon.com does not append "to the request" because webpages sent by Amazon.com are responses and do not meet the court's construction of request.

Soverain's contention that Amazon.com is somehow construing the claims to exclude the embodiments of the patent is simply wrong. The patent does indeed describe situations where the client appends an SID to a request, just as the claims require. '780 Patent, col. 115, lines 65-66 ("the client appends the session identifier to subsequent service requests"); col. 4, lines 25-31 (describing embodiment where client stores SID for use in each request to the server).

Furthermore, Dr. Grimes noted in his technology tutorial that in the '780 patent, clients can append the session identifier to their requests: "The session ID is inserted as part of the pathname of the URL in the client's requests." (Soverain 12/24/04 Tutorial, at slide 45). Thus, the patent fully supports the express claim language requiring that the SID be appended to the request generated by the client and sent to the server.

Soverain's infringement theory is based solely on Amazon.com's servers appending the 3-7-7 number to the URLs in a ***response*** (web pages) sent to customers, a scenario that is not covered by the claim language. The patent may describe appending SIDs to either a request or a response, but the asserted claims set forth just ***one*** of those alternatives: appending "to the request." Soverain essentially asks the Court to rewrite the claim language to replace the word "request" with "response." The Court cannot do so.[5] All of the '780 patent claims at issue on this motion require the appending be to the request, while Amazon.com instead inserts its 3-7-7 number onto the URLs in responses. Thus, there is no infringement of any of these '780 claims.

Dated this 11th day of July, 2005.

Respectfully submitted,

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[5] *Chef America v. Lamb-Weston*, 358 F.3d 1371 (Fed. Cir. 2004) (claim language of heating dough "to" a temperature was clear on its face and could not be rewritten to mean "at" that temperature, even though specification only described heating "at" that temperature and result of heating "to" was burnt, inedible dough).

PROOF OF SERVICE

The undersigned certifies that on the 11th day of July, 2005, the foregoing pleading was electronically filed with the Court. Pursuant to Local Rule CV-5, this constitutes service on the following counsel:

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